

# **Part 1**

## **Introduction**

**Chapter 1 - Physical Training Standardization Philosophy**

**Chapter 2 - PT Execution**

**Formation, PT Positions, Commands and Cadence**

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## CHAPTER 1

### Physical Training Standardization Philosophy

#### Section 1 – The Purpose of Physical Training

The purpose of Physical Training (PT) is to improve and/or maintain physical fitness while controlling injuries. Therefore, a standardized PT program will:

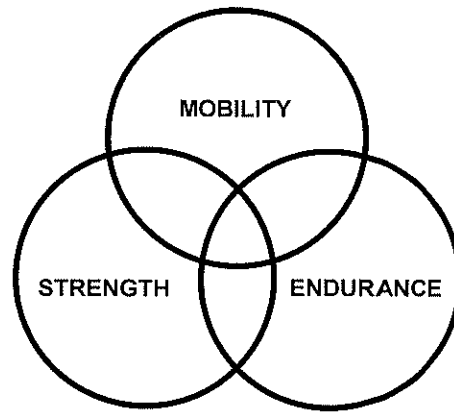
- ❑ Improve physical fitness while controlling injuries.
- ❑ Progressively condition and toughen soldiers.
- ❑ Develop soldiers' self-confidence and discipline.

PT involves safe training that challenges all soldiers while improving their physical fitness level to meet Army standards. Soldiers entering the Army range widely in their levels of physical fitness. Thus, special considerations must be taken when designing PT programs. The regulation and doctrine that govern the conduct of PT are AR 350-1, Army Training and Education, FM 21-20, Physical Fitness Training and Army Physical Training Standardization.

Standardization fosters development and sustainment of a high state of proficiency and readiness among soldiers and units throughout the Army. Standardization is accomplished through the universal application of uniformed practices and procedures. PT standardization is accomplished through an organized schedule of prescribed physical training activities. These activities are methodically sequenced to adequately challenge soldiers entering the Army at a high level of physical fitness while also providing appropriate progression for those soldiers entering the Army at lower fitness levels. Standardized PT emphasizes progressive conditioning of the entire body. PT standardization embodies the fundamental components of strength, endurance and mobility. Standardized training of these components is guided by the over arching principles of exercise: progression, precision and integration. Strict adherence to PT standardization safeguards soldiers by progressively increasing training intensity while controlling injuries.

#### Section 2 - Physical Fitness

**Physical Fitness** enables the soldier to effectively function in work, training and other activities while maintaining optimal health and well being. Physical fitness is essential to combat readiness. Army physical fitness contains three interrelated components: strength, endurance and mobility.



**Figure 1-1.**

**Strength** is the ability to overcome resistance. Soldiers need strength to march under load, enter and clear a building or trenchline, repeatedly load heavy rounds, lift equipment, and transport a wounded soldier to the casualty collection point. The goal of strength training is to attain the strength required to perform functional movements against resistance. A well-designed strength training program improves performance and controls injuries. Calisthenics are the foundation of Army strength training and body management. The conditioning drills contain a structured sequence of calisthenics designed to develop the fundamental movement skills necessary for soldiers to manipulate their own body weight. Strength is further developed through the use of partner carries, pull-ups, rope climbing, obstacle negotiation, free weights and strength training machines.

**Endurance** is the ability to sustain activity. Endurance training enhances both the ability to sustain high intensity activity of short duration (anaerobic) and low-intensity activity of long duration (aerobic). Examples of anaerobic training are sprinting, individual movement techniques, and negotiating obstacles. Examples of aerobic training are continuous running, foot marching, cross-country movement, and water survival. A properly planned and executed endurance-training program will be balanced with respect to both aerobic and anaerobic training. Endurance training programs based solely on distance running, while likely to improve aerobic endurance, may fail to prepare units for the anaerobic endurance requirements of soldier common tasks.

**Mobility** is movement proficiency. The component of mobility functionally applies strength and endurance to enhance performance of physical tasks. For example, strength with mobility allows a soldier to squat low, in order to achieve a safe and effective position to lift a casualty. Without sufficient mobility, a strong soldier may have difficulty executing the same casualty transport technique. Likewise, endurance without mobility may be fine for a distance runner, but for soldiers performing individual movement techniques (IMT), both components are essential for success. Mobility consists of eight qualitative performance factors: agility, balance, coordination, posture, stability, flexibility speed and power.

1. **Agility** is the ability to stop, start, change direction and efficiently change body position. Performing guerrilla drills, the shuttle run, and negotiating obstacles all improve agility.

2. **Balance** is the ability to maintain equilibrium. It is an essential component of movement. External forces, such as gravity and momentum, act on the body at any given time. Sensing these forces and responding appropriately leads to quality movements. The activities in this manual are designed to challenge and improve balance.

3. **Coordination** is the ability to perform multiple tasks. Driving military vehicles and operating various machinery and weaponry requires coordination. Coordination of arm, leg, and trunk movements is essential in climbing and IMT.

4. **Posture** is any position in which the body resides. Posture is fluid and constantly changing as the body shifts to adapt to the forces of gravity and momentum. Good posture is important to military bearing and optimal body function. Proper carriage of the body during standing, sitting, lifting, marching, and running is essential to movement quality, performance, and injury control.

5. **Stability** is the ability to maintain or restore equilibrium when acted on by forces trying to displace it. Stability is dependent upon structural strength and body management. It is developed through regular, precise performance of calisthenics and strength training activities.

6. **Flexibility** is pain-free range of motion at or around a joint; including the surrounding muscle groups. Functional flexibility is dependent upon good posture and stability. Quality movements through a full range of motion, such as lifting a heavy load from the ground to an overhead position, require stability to ensure optimal performance without injury.

7. **Speed** is rate of movement. Many soldier tasks require speed. Speed is improved through better technique and conditioning. For example, running speed is improved by lengthening stride (improving technique) and increasing pace (improving conditioning).

8. **Power** is the product of strength and speed. Throwing, jumping, striking, and moving explosively from a starting position require both speed and strength. Power is generated from the hips and torso. Developing strength, stability, and mobility is important to increasing power.

**Body composition** is the amount of body fat a soldier has in comparison to his lean body mass. Body composition is a component of health and well being, contributing to physical performance. Improving the components of strength, endurance and mobility through a sound physical training (PT) program, accompanied by good nutritional practices, will promote the maintenance of appropriate body composition. Refer to AR 600-9, The Army Weight Control Program, for specific information on diet, weight control and body composition guidelines.

### Section 3 – Exercise Principles

Adherence to certain basic exercise principles is essential to an effective and well-balanced PT program that safely challenges all soldiers. There are three principles of exercise (Precision, Progression and Integration) that must be followed to ensure safe training at an optimal level.

**Precision** is the strict adherence to optimal execution standards for PT activities. Precision is based on the premise that the quality of movement is just as important as the weight lifted or repetitions performed. It is important not only for improving physical skills and abilities, but also for decreasing the likelihood of injury due to faulty movement. A precise execution standard in

the conduct of all PT activities ensures the development of body management and fundamental movement skills.

**Progression** is the systematic increase in the intensity and/or duration of PT activities. Proper progression allows the body to positively adapt to the stresses of training. When progression is violated by too rapid an increase in intensity and/or duration, the soldier is unable to adapt to the demands of training. The soldier is then unable to recover which leads to over-training or the possibility of injury.

**Integration** is the use of multiple training activities to achieve balance in the PT program and appropriate recovery between PT activities. Because most common soldier tasks require a blend of strength, endurance and mobility, PT activity schedules are designed to challenge all three components in an integrated manner. The principle of integration is evident when common soldier tasks or component movements of common soldier tasks are a part of PT. For example, the exercises in the conditioning drills develop the strength, mobility and the physical skills needed to negotiate obstacles. Military Movement Drill 2 is designed to improve movement under direct or indirect fire and casualty evacuation. The exercise drills in this manual integrate critical soldier tasks, thereby making PT an essential link in the chain of soldier physical readiness.

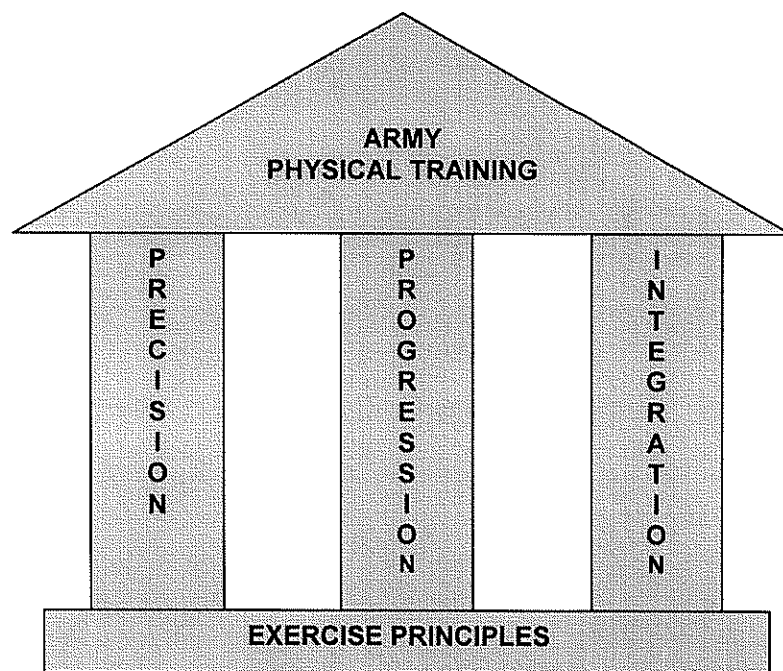


Figure 1-2.

#### Section 4 – PT Assessment and Evaluation

The Army standard for assessing physical fitness is the Army Physical Fitness Test (APFT). The commander may use a number of assessment tools appropriate to determining his unit's readiness based on mission and METL. The APFT is one of these tools. The APFT measures baseline physical fitness, qualifying soldiers to wear the uniform. There may be additional physical requirements to meet the unit mission. IAW AR 350-1, Training in Units,

The APFT must be performed at least two times per year for active units and once per year for reserve component soldiers. Refer to Chapter 12 of this manual for procedures to conduct of the APFT.

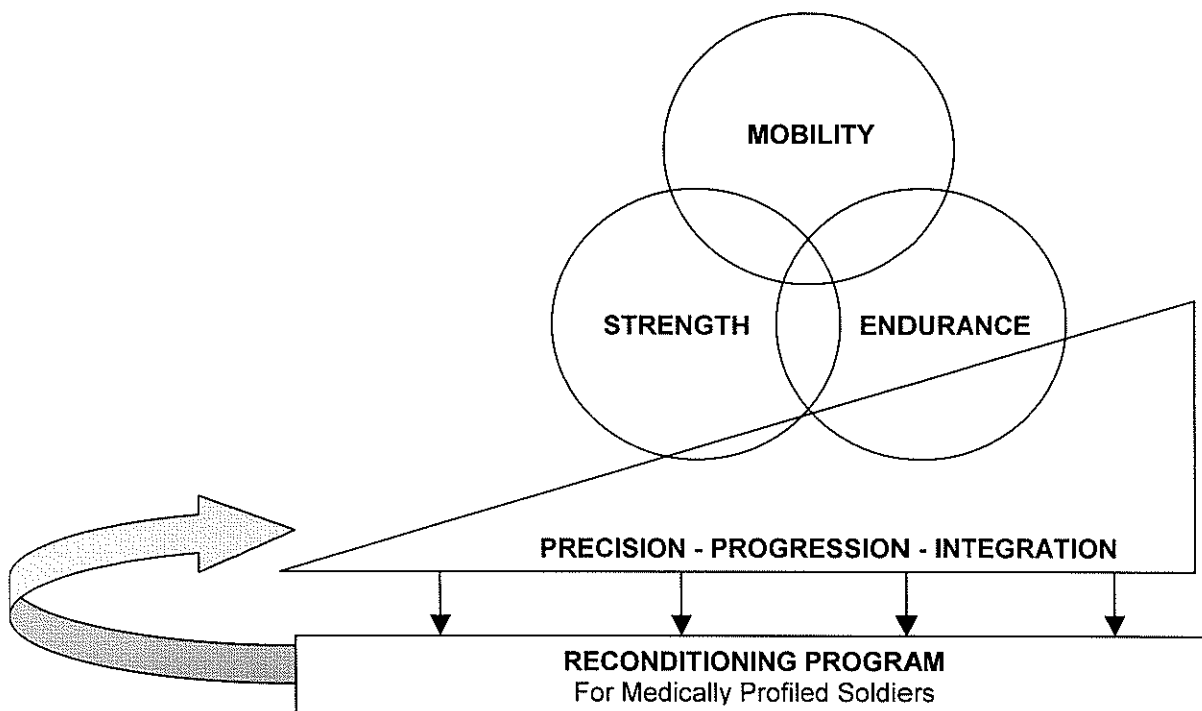
The Physical Fitness Screening Assessment, described in Chapter 13 of this manual, is a quick and easy snapshot for the commander of unit APFT readiness. This assessment may even be administered by the soldiers, themselves as part of a PT session.

The Combat Water Survival Test (CWST), described in Chapter 14 of this manual, evaluates soldiers' ability levels toward surviving in a water environment. The combat water survival training described in Chapter 10 of this manual provides the necessary skill development to improve swimming ability.

The commander may choose any of a number of assessments to measure unit physical fitness as it relates to combat readiness. However, the assessment must be closely aligned with the unit's mission and METL to be an effective measure of physical readiness to perform mission tasks.

### Section 5 – Summary

Standardized Army PT embodies the three fundamental components of strength, endurance and mobility. Training of these components is guided by the overarching exercise principles of precision, progression and integration. Strict adherence to these principles in a well developed program enhances physical fitness while controlling injuries.



**Figure 1-3.**

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## CHAPTER 2

### PT EXECUTION

#### Section 1 – Execution of Standardized PT

The key to success of Standardized PT execution is skilled leadership that employs command voice and organized instruction in the extended rectangular formation with a demonstrator and trained assistant instructors (AIs). This chapter describes in detail the formations, positions and commands used in the execution of Standardized PT.

#### Section 2 – Extended Rectangular Formation

The Army's traditional formation for PT activities is the extended rectangular formation. It is simple, easy to assume and may be applied with equal facility and promptness to any unit, makes it the best type to employ for large numbers of soldiers. The PT leader will position the unit in a line formation so that the unit will be centered and five paces away from the PT platform after they have assumed the extended rectangular formation. The PT leader gives the following commands:

- ***“Extend to the left, MARCH.”*** Soldiers in the right flank file stand fast with their left arm extended sideward with palms down, fingers and thumb extended and joined.
- All other soldiers turn to the left and double-time forward. After taking the sufficient number of steps, all soldiers face the front and extend both arms sideward with palms down, fingers and thumbs extended and joined. The distance between fingertips is approximately 12 inches and dress is to the right.
- ***“Arms downward, MOVE.”*** The soldiers lower their arms smartly to their sides. Soldiers in the right flank file lower their left arms to their sides.
- ***“Left, FACE.”*** Soldiers execute the left face.
- ***“Extend to the left, MARCH.”*** Soldiers in the right flank file stand fast with their left arm extended sideward with palms down, fingers and thumb extended and joined. All other soldiers turn to the left and double-time forward. After taking the sufficient number of steps all soldiers face the front and extend both arms sideward with palms down, fingers and thumbs extended and joined. The distance between fingertips is approximately 12 inches and dress is to the right.
- ***“Arms downward, MOVE.”*** Soldiers lower their arms smartly to their sides. Soldiers in the right flank file lower their left arms to their sides.
- ***“Right, FACE.”*** Soldiers execute the right face.
- ***“From front to rear, COUNT OFF.”*** The front soldier in each column turns the head to the right rear and calls off, **“ONE”**, and faces the front. Successive soldiers in each column call off in turn **“TWO,” “THREE,” “FOUR,”** and so on. The last soldier in each column will not turn the head and eyes to the right while sounding off.
- ***“Even numbers to the left, UNCOVER.”*** Even-numbered soldiers side step to the left squarely in the center of the interval, bringing their feet together.

To reassemble the formation, the PT leader gives the following command:

- ***“Assemble to the right, MARCH.”*** All soldiers double-time to their original positions in the formation. Refer to Figures 2-1 and 2-2, Rectangular and Extended Rectangular Formations.

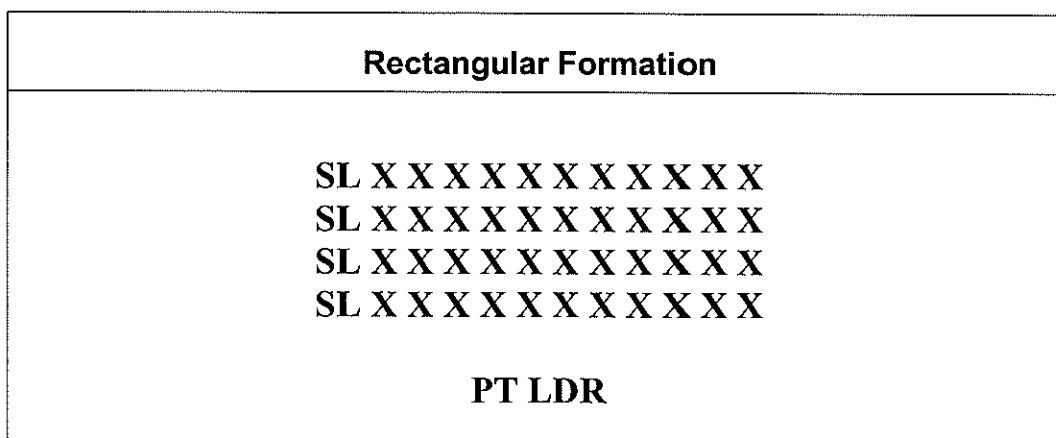


Figure 2-1.

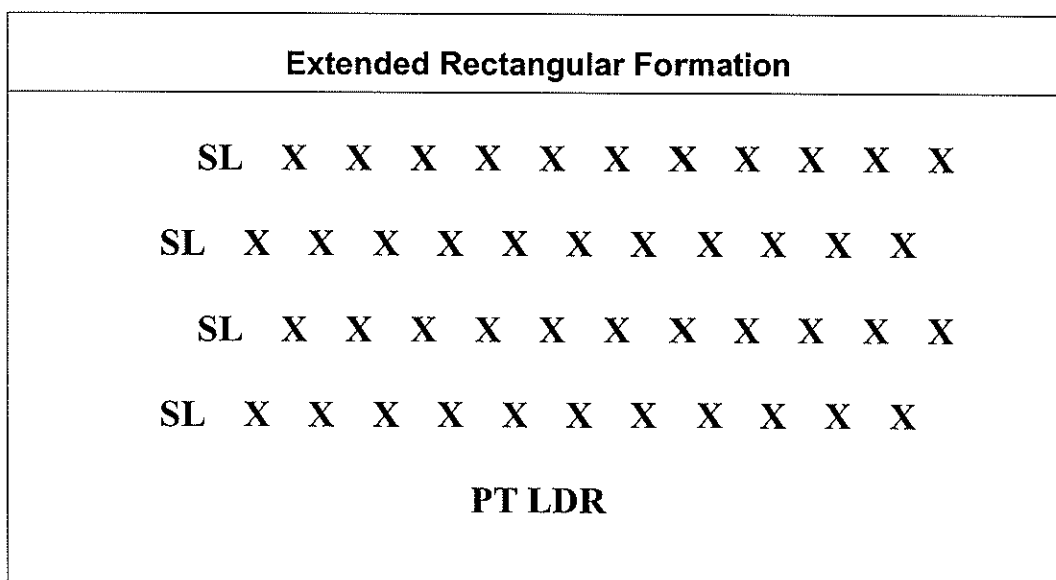
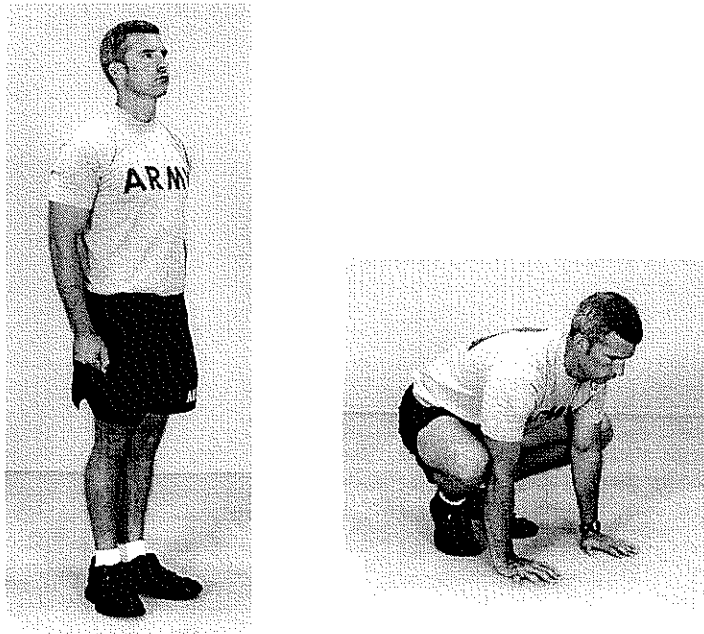


Figure 2-2.

### Section 3 – PT Positions

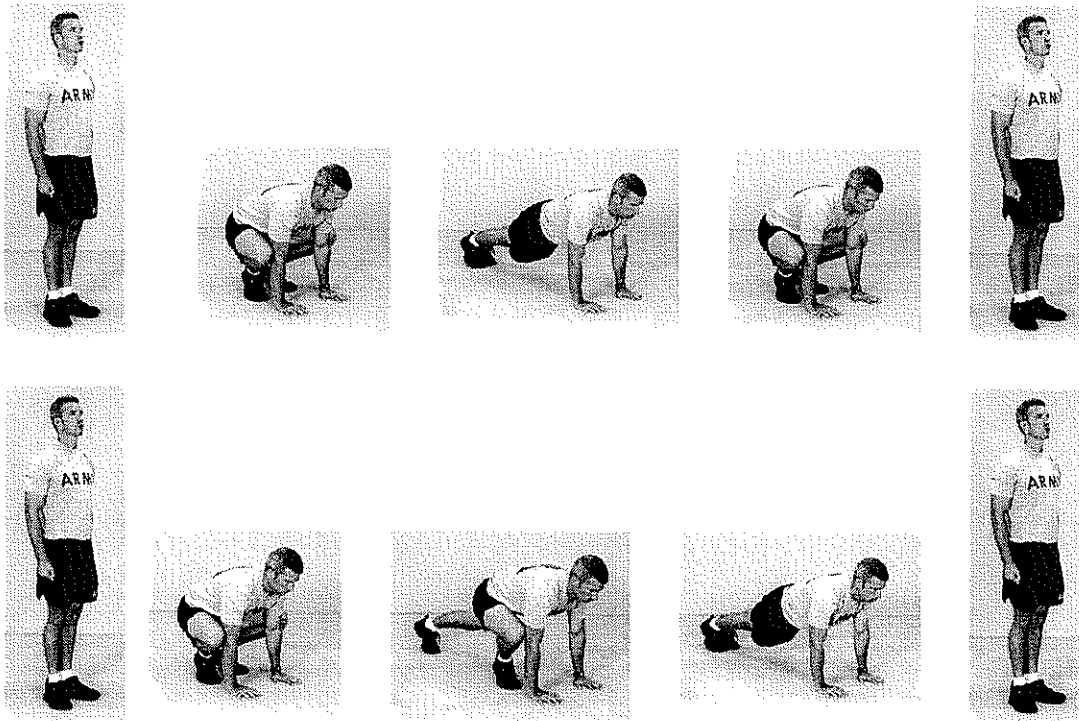
**Starting Positions:** When a set of conditioning exercises is employed, soldiers assume the proper starting position of each exercise on the command, “*Starting position, MOVE.*” When conducting exercises, soldiers are commanded to return to the position of attention from the terminating position of the exercise, before being commanded to assume the starting position for the next exercise.

**Squat Position:** From the position of attention, lower the body by bending the knees and placing the hands with palms down and fingers spread, shoulder width in front of the body, in between the legs. Raise the heels, supporting body weight on the balls of the feet and hands. The head and eyes are directed to a point approximately two feet in front of the body.



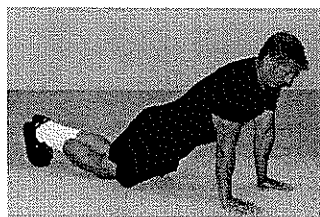
**Figure 2-3.**

**Front Leaning Rest Position:** The front leaning rest position is obtained by performing two movements. From the position of attention move to the squat position then thrust feet backward to the front leaning rest position. If a soldier has difficulty with the squat thrust, they can step back with the left leg, then with the right leg to obtain the front leaning rest position. In the front leaning rest, maintain straight body alignment from head to heels. Body weight is supported on the hands (shoulder width) and balls of the feet. The feet and legs are together.



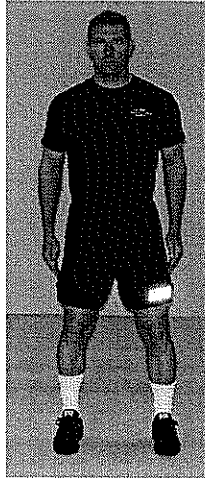
**Figure 2-4.**

**Six-point Stance:** The six-point stance is obtained by dropping to the knees from the front leaning rest position. A straight line is maintained from the head to the knees.



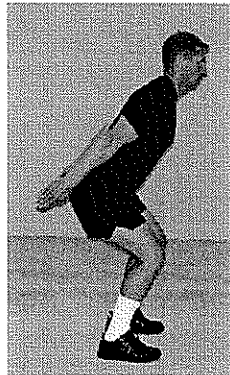
**Figure 2-5.**

**Straddle Stance:** Stand with feet straight ahead and aligned with the shoulders.



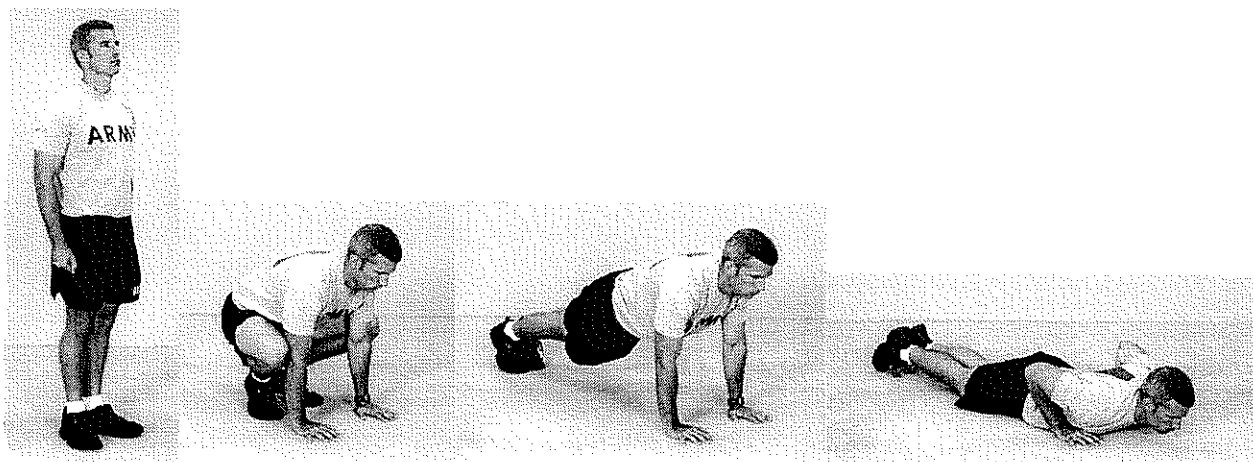
**Figure 2-6.**

**Forward Leaning Stance:** Bend trunk forward 45-degrees to the ground, knees bent 45-degrees with the heels flat on the ground and the feet aligned with the shoulders. Keep the back straight, maintaining a straight line from the head to the hips.



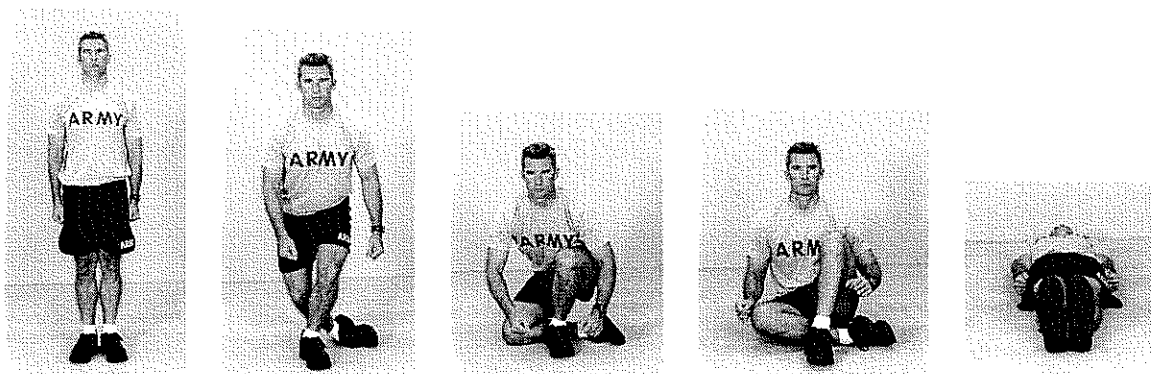
**Figure 2-7.**

**Prone Position:** The prone position is obtained by performing three movements. From the position of attention move to the squat position, thrust the feet backward to the front leaning rest position, then lower the body slowly to the ground. Elbows are close to the body and point directly to the rear.



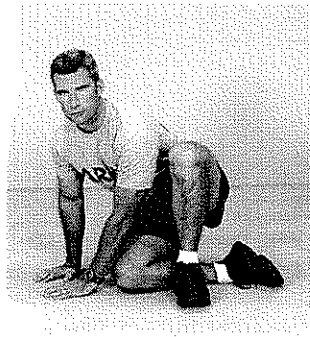
**Figure 2-8.**

**Supine Position:** To assume the supine position without using the hands, from the position of attention, place one foot behind the other and slowly lower your body until the rear knee touches the ground. Sit back onto buttocks, and then lay on back with feet and legs together. When returning to the standing position, sit up and rock forward on one knee. From this position, step up with the other leg and stand without using the hands for assistance.



**Figure 2-9.**

If soldiers have difficulty assuming this position, have them place their hands on the ground as they slowly lower their bodies to the seated position. If soldiers are unable to attain the standing position without using their hands, they should place them on the ground to either side of the body and push up while standing from the seated position.



**Figure 2-10.**

To return to the position of attention from the supine position, soldiers perform the actions above in reverse order.

#### **Section 4 – PT Commands**

The importance of proper commands in conducting the PT program cannot be underestimated. Invariably, the performance directly reflects the command. Indifferent commands produce indifferent performance. When the command is given distinctly, concisely, with energy, and with proper regard to rhythm, the performance will reflect the command.

There are two kinds of commands used in PT; preparatory commands and commands of execution. The preparatory command describes and specifies what is required. All preparatory commands are given with rising inflection. The command of execution calls into action what has been prescribed. The interval between the two commands is long enough to permit the soldier to understand the first one before the second one is given.

When a set of conditioning exercises is employed, soldiers assume the proper starting position of each exercise on the command, “***Starting Position, MOVE.***” When conducting exercises, soldiers are commanded to return to the position of attention from the terminating position of the exercise, before being commanded to assume the starting position for the next exercise. PT leaders use the command, “***Position of Attention, MOVE***” to command soldiers to the position of attention from the terminating position of an exercise.

## Section 5 – PT Cadence

Cadence speed is described as SLOW or MODERATE. The speed of each cadence is listed below:

- **SLOW – 50 counts per minute.**
- **MODERATE – 80 counts per minute.**

Once soldiers have learned the exercises by the numbers, the PT leader merely needs to indicate the name of the exercise, command the soldiers to assume the starting position, and start them exercising to cadence. For example, this is how the PT leader begins Exercise 1 of Conditioning Drill 1, The Bend and Reach to cadence:

- The PT leader states, **“The Bend and Reach.”**
- The soldiers respond, **“The Bend and Reach.”**
- The PT leader commands, **“Starting Position, MOVE.”** Soldiers assume the starting position.
- The PT leader commands, **“In Cadence,”** (soldiers respond, **“In Cadence”**), **“EXERCISE.”**
- The command **EXERCISE** initiates movement to the position of count one.

Counting cadence ensures that exercises are performed at the appropriate speed. The cadence count indicates termination of movement to each position. The cumulative count is a method of indicating the number of repetitions of an exercise on the fourth count of a 4-count exercise. The use of the cumulative count is required for the following reasons:

- It provides the PT leader with an excellent method of counting the number of repetitions performed.
- It serves as motivation. Soldiers like to know the number of repetitions they are expected to perform.
- It prescribes an exact amount of exercise for any group.

A 4-count exercise is counted as follows:

- The PT leader counts, **“ONE, TWO, THREE.”**
- The soldiers respond, **“ONE.”**
- The PT leader counts, **“ONE, TWO, THREE.”**
- The soldiers respond, **“TWO.”**
- The PT leader counts, **“ONE, TWO, THREE.”**
- The soldiers respond, **“THREE,”** etc.



To terminate an exercise, the PT leader will raise the inflection of his voice while counting out the cadence of the last repetition. The soldiers and PT leader respond with **HALT** upon returning to the starting position.

A 4-count exercise is terminated as follows:

- The PT leader counts, **“ONE, TWO, THREE.”**
- The soldiers respond, **“NINE.”**
- The PT leader counts, **“ONE, TWO, THREE.”** (with voice inflection).
- The soldiers and PRT leader respond, **“HALT.”**
- The PT leader commands, **“*Position of Attention*, MOVE.”** Soldiers assume the position of attention.

## **Section 6 – Stretch Drill Commands**

When performing the Stretch Drill, **no verbal cadence is used**. Soldiers move in and out of the starting position and each exercise position on the PT leader’s commands. Soldiers hold each exercise position for 30 seconds during cool-down. **Do not count the seconds out loud**. This is how the PT leader conducts Exercise 1, The Overhead Arm Pull, of The Stretch Drill:

The PT leader states, **“The Overhead Arm Pull.”** (The soldiers respond, **“The Overhead Arm Pull.”**)

The PT leader commands, **“*Starting Position*, MOVE.”** (The soldiers move into the starting position, straddle stance with hands on hips).

“The command to begin the stretch is ***Ready, STRETCH.*** Raise the right arm overhead and place the right hand behind the head. Grasp above the right elbow with the left hand and pull to the left, leaning the body to the left. Hold this position for 30 seconds.

The PT leader commands, **“*Starting Position*, MOVE.”** (The soldiers move into the starting position.)

“The command to stretch the other side of the body is **“*Change Position, Ready, STRETCH.*”** Raise the left arm overhead and place the left hand behind the head. Grasp above the left elbow with the right hand and pull to the right, leaning the body to the right. Hold this position for 30 seconds.

The PT leader commands, **“*Starting Position*, MOVE.”** (The soldiers assume the starting position.) The PT leader assumes the Position of Attention and commands, **“*Position of Attention*, MOVE.”** (The soldiers assume the position of attention.)

The PT leader states the next exercise.

## Section 7 – Conditioning Drill 2 Commands

Exercise 1 of Conditioning Drill 2, The Push-up and Exercise 2 of Conditioning Drill 2, The Sit-up are 4-count exercises conducted to cadence (see “Cadence” for execution of 4-count exercises).

Exercise 3 of Conditioning Drill 2, The Pull-up is 2-count exercise conducted to cadence. The commands, **UP** and **DOWN** are used to direct the soldiers to perform the exercise movements and to control the speed of movement. This is how the PT leader conducts Exercise 3 of Conditioning Drill 2, The Pull-up:

- Soldiers assemble into groups of three, 1 exerciser and 2 spotters.
- The PT leader states, “**The Pull-up.**”
- The soldiers respond, “**The Pull-up.**”
- The PT leader commands, “**Starting Position, MOVE.**” The soldiers assume the starting position at a dead hang, with spotters front and rear.
- The PT leader commands, “**Ready, UP,**” (soldiers perform count one.)
- The PT leader commands, “**DOWN,**” (soldiers perform count two.)
- The soldiers state, “**ONE.**”
- The PT leader commands, “**UP, DOWN.**”
- The soldiers respond, “**TWO.**”
- The PT leader counts, “**UP, DOWN.**” The soldiers respond, “**THREE.**”
- The PT leader counts, “**UP, DOWN.**” The soldiers respond, “**FOUR.**”
- The PT leader commands, “**UP, DOWN.**” (with voice inflection). The soldiers respond, “**HALT.**”
- The PT leader commands, “**DISMOUNT.**” Soldiers dismount the bar utilizing the footsteps and change position with one of the spotters.

## Section 8 – Conditioning Drill 3 Commands

All exercises in Conditioning Drill 3 are 4-count exercises conducted to cadence (see “Cadence” for execution of 4-count exercises).

## Section 9 – Mirror Effect

When leading exercise in front of the formation, the PT leader begins the movements in count one to the right and continues to mirror the soldier’s movements while facing them throughout the exercise.

## Section 10 – Summary

Successful execution of Standardized PT is dependent upon the leadership of competent instructors and AIs. PT leaders must not only possess the knowledge, skills and ability to execute the program, but also present a positive image of physical fitness.